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241 According to official data 1,434 square miles of land, or close to
311 70 per cent. of Bali's surface, was under cultivation in 1948. Of that area 26 per cent. consisted of wet ricefields, 41 per cent. of non-irrigated fields (about one-third of them planted with maize, one-third with beans and tubers, and one-seventh with rice), 7 per cent. of coffee gardens, and 17 per cent. of coconut groves. By far the largest complex of *sawahs* is in the central Balinese highlands, where it covers an important part of the present regions of Tabanan, Badung, Gianyar, and Klungkung. In the other regions the *sawah* area is considerably smaller. The mountainous Bangli has *sawahs* only at its southern point, Karangasĕm and Jĕmbrana each have a *sawah* belt around their regional capitals, and Buleleng has two *sawah* areas, one around the administrative seat and one in the stretch to the northwest of the Batu Kau.

Figures on the farmland available in 1948 and comparative data on the relative density of population are given in Table 6.

161 TABLE 6: DENSITY OF POPULATION ON BALI PER REGION IN COM-
241 PARISON TO FARMLAND AVAILABLE, 1950
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Region	*Total Area (in square miles)*	*Population (1950)*	*Sawah Acreage (1948)*	*Dry-Field Acreage (1948)*	*Inhabitants per Square Mile of Farmland*
Buleleng	510	229,870	34,489	131,387	798
Jĕmbrana	383	63,153 (?)	15,018	71,095	489 (?)
Tabanan	849	238,380	62,198	110,847	881
Badung	209½	259,980	47,738	60,119	1,536
Gianyar	142	221,490	30,098	34,835	1,932
Bangli	201	100,010	7,037	72,318	795
Klungkung	121½	113,870	11,938	48,610	1,807
Karangasĕm	338½	257,150	18,875	130,800	1,080
Bali	2,170½	1,484,043	258,261	679,513	1,933

Table 7 gives figures on the net yields from agriculture for 1953. These few figures[14] are perhaps enough to indicate the importance of agriculture, and in particular wet-rice farming.

241 The latter is, in fact, mentioned even in very old royal edicts.
312 One of them dating from 1022 refers to the irrigation association as *kĕsuwakan*, a term related to the Modern Balinese word for

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TABLE 7: CROP YIELDS ON BALI, 1953

Crop	Yield (in Imperial cwt)
Husked rice	
from wet fields	3,007,064
from dry fields	227,806
Maize	1,150,981
Tubers	1,056,801

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that concept, *subak*. Another edict, dating from 896, mentions, alongside of other *undagis*, or craftsmen, the *undagi pĕngarung*.[15] *Pĕngarung* comes from an Old Balinese root *arung*, which in Modern Balinese has become *aung*, whence are derived *aungan* (tunnel for irrigation water)[16] and *ngaung* (to make an *aungan*). Hence *undagi pĕngarung* means 'tunnel-builder'. If there were already tunnel-builders in 896 it may be assumed that wet-rice farming on Bali is significantly older than that. The modern phase of wet-rice farming is considered in this volume in a study by Grader of the irrigation associations in Jĕmbrana.[17]

5

The Balinese Desa

The people who carry on agriculture live in village communities called *desas*, and the *desa* is the chief social unit on Bali. In central Bali one can see *desa* after *desa* lying in a grove amidst its shelving *sawahs:* a cluster of compounds surrounded by clay walls and planted with clumps of bamboo and with banana, coconut, and other useful trees.

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From the inscriptions it is known with certainty of various *desas* that they were already in existence a good nine or ten hundred years ago. For the ordinary Balinese the *desa* must in earlier times have figured as the focal point of the universe, considering the frequent recurrence of the name 'navel temple' for one of the three village sanctuaries. (In Balinese as in other Indonesian languages 'navel' has the connotation of 'centre'.)

The *desa* is often defined as a community of worship. An important part of its function does, indeed, lie in the religious

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121 expression in *desa* life: the village temples, the village administration and its meetings, and the village ceremonies.

I

The Temples

778 The various temples intended particularly for religious purposes on the village level demonstrate clearly to what extent religion is a fundamental factor in *desa* society. On Bali there are, of course, various categories of temples, each associated with a certain group of people.

575 592 243 312 Besides the village temples to be discussed below, there are sanctuaries venerated by the irrigation association, the family, the realm. Moreover there are special temples for sacred places such as mountain peaks, lakes, and forests, and for special voluntary associations (*puras pĕmaksan*, *puras panti*) such as *barong* groups and the like. The irrigation-association sanctuaries may be subdivided into *subak* temples, weir temples, and other sanctuaries. Among the state temples a distinction must be made between the *puras pĕnataran* of the various principalities and Pura Bĕsakih, the sanctuary for the whole of Bali. An intermediate stage between the state temples and temples at holy places is formed by the temples of origin and the *sadkayangans*. The temples of origin referred to here are neither the family *puras kawitan* or *kĕmimitan* nor the village *puras pusĕh* or navel temples, but the sanctuaries of the origin of the world which bear such various names as *pura pusĕr ing jagat* (world-navel temple), *pura pusĕr ing tasik* (sea-navel temple), *pura kĕntĕl gumi* ('temple where the whirling earth has congealed'), and the like. The *sadkayangan* temples are a group of sanctuaries of general (that is to say not local) significance, of which there are differing listings. Four or five temples recur in all these lists, but each separate list also has a few varying names. Pura Pĕnataran Sasih, Pura Batu Kau, Pura Yeh Jĕruk, and Pura Goa Lĕlawah are among the names recurring in all lists. Among the family temples are the household temples (*sanggahs*, or, for the nobility, *pĕmĕrajans*), the family origin temples (*puras kawitan* or

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various temple festivals, and the celebration of the chief festivals *pangĕlĕm* (at which the ruler throws golden images of fish and shrimp into the sea at full moon in the month of Kapat) and *mălĕlasti* (when the gods are ritually purified in the sea). The village of Bungaya, together with neighbouring villages, has the task of supplying offering platforms.

Participation in the cockfights was compulsory in earlier times, with the proceeds serving for specific offerings. Such obligations are still to be found, for example, in the villages in the vicinity of the *desa* of Munchan (in Karangasĕm) for offerings in certain temples located in this chief village.

The village temples are also used for many irrigation-association festivals. One example out of many is the offering festival for irrigation water held in the *pura bale agung* at Sĕlat.

After this list of some of the festivals and ceremonies which must be held in a village context a word may be devoted to the basic thought behind such solemnities. This consists of the seeking of contact with the gods and the purification of the *desa* territory of certain magical stains.

In the earlier literature regarding Bali the theory is rather frequently advanced that the original Balinese knew only spirits and ghosts, and had first learnt of gods from the Hindus. Such a theory is based on insufficient knowledge both of the nature of the Balinese gods and of Hinduism, for the Balinese had not only evil spirits and demonic forces but many gods, while on the other hand the Hindus had many demons besides their celestial gods.

With a reference to the valuable outline of Hindu Balinism made by Dr Bosch,[16] I may point out that Hinduism came to Bali in two forms, as a priestly religion, particularly of the Çaiwasiddhānta sect, and as literature. The Çaiwasiddhānta sect had little respect for a temple cult and reduced everything religious to the contact of the disciple with his mentor and the layman with his priest. Moreover it had strong esoteric inclinations, so that its secret doctrine could only be imparted to those who were destined later to act as priests themselves. Hence the task of the Hindu-Balinese *pĕdanda* was not at all that of officiating in the temples,

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769 792 completely purified, they are worshipped in the *pura pusĕh* as deified ancestors.

792 Besides the three temples *pusĕh*, *bale agung*, and *dalĕm*, mention may also be made of the water or source temple, traditionally called *pura kayĕhan*, and more recently *pura paji*. Moreover there are the mountain temples, *puras bukit*, and the sea temples, *puras sĕgara*.

312 575 794 Besides worship in a village context the ordinary Balinese, and particularly the Balinese of the plains, worship in an irrigation-association context. All the parts of Bali that are irrigated are divided into large irrigation territories which are subdivided into weir districts, and those in turn into irrigation associations. Each of these territorial divisions has its own temple, though the names vary slightly from region to region. The temple of the irrigation territory whose water comes from a single lake is sometimes called *pura bĕdugul;* elsewhere the temple of the larger irrigation territory is called *pura ulun siwi*.

The weir temples are called *puras ĕmpĕlan*. The usual name of the sanctuary of an irrigation association is *pura subak*,[10] though in Gianyar this name is not to be found, and there one speaks of [243] *pura mas-cheti*. In this latter temple the harvest festival (*usaba*) and other less important ceremonies connected with rice growing are celebrated. (It should be pointed out that though the word *usaba* now means 'harvest festival' in northern Bali, in Karangasĕm it indicates an annual temple festival. This usage is certainly an older one, and is more in agreement with the original significance of the Sanskrit word *utsawa*.[11] In general the nomenclature of the temple festivals is deviant, and often more in accord with older tradition, in Karangasĕm.)

792 794 Worship in a larger context than the village or irrigation association is conducted first of all in the *puras pĕnataran*, which may well be called state temples.

While the *pĕnataran* temples point towards the unity of a realm, another group of sanctuaries with a somewhat comparable character is that of the temples known as *pusĕr ing jagat*, 'the navel of the

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The Irrigation System in the Region of Jembrana

I

The Irrigation Association

An irrigation association, or *subak*, comprises a larger or smaller number of owners or holders of irrigable fields together forming one consolidated complex, and has the aim of promoting common irrigation interests. As a rule the *sawahs* lying within the territory of one *subak* obtain their irrigation water from one and the same main conduit, for which reason the *subak* is legally defined as a "group of *sawahs* which, being watered from the same conduit or the same branch of a conduit, forms an irrigation association"[1] – a description which a number of authors have accepted. There are various kinds of exceptions to this definition. One example is the *subak* of Kaliakah, whose westerly *sawahs* are dependent on the Daya River (in Negara) for their irrigation water, while the rest of the fields are irrigated from the Kaliakah. The two parts going to make up this *subak* actually have no common irrigation interests, but since each of them was too insignificant to function effectively by itself they united into one irrigation association so that their board could be given a broader task and mutual assistance for large-scale activities could be organized more satisfactorily. It is, incidentally, the custom that only those members of this *subak* who derive advantage from a measure have to bear the financial consequences for it. Several other cases approaching the circumstances in the *subak* of Kaliakah are mentioned in an unpublished monograph on landrent in Jembrana dating from 1932. In any number of cases *subaks* have common interests, which manifest themselves above all in collective ownership of weirs and conduits and in joint worship of temples.

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312 241 474 Expenses are usually apportioned according to the number of *sawah*-holders, or, as the term goes, every *pĕngalapan* pays the same amount. By *pĕngalapan* is meant the water inlet through which one *kĕsit* of *sawahs* is irrigated from the conduit. A *kĕsit* consists of a series of *sawah* plots lying one behind the other and belonging to the same person. If behind a *kĕsit* there is another belonging to someone else, the latter never receives the excess irrigation water from the *kĕsit* lying upstream, as is the case for the *sawahs* of one *kĕsit;* instead, a special branch conduit is constructed from the main conduit along the *sawah* dikes of the upstream *kĕsit* to the other *kĕsit*. The holders of the *sawah* plots beside this conduit, for whom the water is not intended, may not appropriate any water from it without running the risk of being punished by the *subak* for water theft.

The *subak* functionaries take care that the water inlet for each *kĕsit* admits exactly the right amount of water needed for proper irrigation. In this the *sawah*-holders give their full cooperation, aware that it is in their own interests, since an excessive amount of water is harmful to the crops. It is for this reason that farmers are to be seen in the *sawahs* during heavy rains, to prevent too much water from coming into the *kĕsit*. Mutual assistance in the form of exchanging labour is frequent between *subaks* or groups of *subaks*, often under the auspices of the regional and lower agricultural officials, the *sĕdahan agung* and *sĕdahan*.

2

The Subak Board

The head of the *subak* association is the *klihan subak*, who is appointed by the *sĕdahan* and the *sĕdahan agung*, though the feelings of the members of the *subak* are definitely taken into account. The *klihan* selects certain helpers, again more or less in accord with the preferences of the *subak*. They consist of an assistant *klihan*, and several *jurus arah*, or criers, and assistant *jurus arah*. The number of criers depends on the size of the *subak*, the lay of the land, the number of *subak* members, and the extent to which their dwellings

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SYSTEM OF WATER DISTRIBUTION IN A SUBAK

1 River
2 Weir
3 *Subak* inlet
4 Conduit
5 Distribution block
6 Secundary inlet
7 Branch conduit
8 Secundary distribution block
9 *Kĕsit* inlet
10 Passage between *sawahs* within *kĕsit*
11 Overflow
12 *Sawah* dike
13 *Sawah* plot

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312 241 474 are scattered. A crier's jurisdiction is called *arahan*. A general term for a *subak* functionary is *pĕnyarikan subak*, that is to say a person who makes notes. Members of the *subak* board are exempted from *subak* services, but not from head levies. An ex-functionary is sometimes given exemption from services for one *kĕsit*, but only for a specified time, the length of the exemption depending on the degree to which he has been of aid to the *subak*.

In connection with religious life as it finds expression in the *subak* organization, reference must also be made to the *pĕmangkus*, the temple officiants. The normal course of affairs is that in each *subak* sanctuary care for the maintenance of the temple is given to a *pĕmangku* assisted by one or more helpers (depending on the extent of his duties) who are chosen from among the members of the *subak* and, like their superior, are exempted from *subak* services. As in the case of the other *subak* functionaries, the exemption does not extend to the levies in money or in kind. The *pĕmangku*, too, if he is a *sawah*-holder, has to pay his share of such levies. The *pĕmangku* has charge of the presenting of offerings, including the special offerings on *rĕrainan*.[2] He is qualified to ask the deity for holy water and to lead the offering ceremonial.

792 312 241 The *pĕmangkus* of the temples of Tilarnĕgari, Bakungan, Maospait, and Pĕgubugan receive a share of the harvest from each *subak* member participating in the religious ceremonies as a compensation for their services. This compensation, called *pĕlaba*, consists of one handful of unthreshed rice per *kĕsit*. The paddy set aside for religious purposes in this way is called *pantun sari n taun*, the spiritual share of the year's yield. Originally the *sari n taun* was converted into money and the proceeds used for the purification ritual performed whenever crops were molested by mice, worms, locusts, or other vermin. It also served to cover the costs of bringing in holy water and of *nĕduh*,[3] but when the government defrayal to the *pĕmangkus* was abolished in 1922, the *sari n taun* was made a substitute for it. As a reward for their services the *pĕmangkus* also have a right to the doits placed in the offerings.

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3

Subak Services and Levies

The *subak* obligations are divided into two groups, *pĕkaryan* and *pĕnyubaktian*, depending on whether they pertain to activities of a profane nature or to religious matters. Included in the *pĕkaryan* are services in connection with the construction, maintenance, and repair of weirs, water tunnels, open conduits, distribution blocks, and *subak* roads. The *pĕnyubaktian* obligations have to do with worship in the various *subak* temples, the holding of offering festivals, and purification ceremonies.

Just as in the *banjar* the fiscal unit is the *paon*, the hearth, in the *subak* it is the *pĕngalapan*, the water inlet of a *kĕsit*. For each *kĕsit* the same amount of services needs to be rendered to the *subak* and the same share in the head levy needs to be paid. However, when a *kĕsit* is worked by more than one person, for example by the owner and his sharecroppers or by several heirs together, just as many persons should present themselves for *subak* services as are working on the *kĕsit*, since in this case the actual concept of a *kĕsit* as a complex of *sawah* plots held by one person has been broken with. Consequently that rule does not apply when the owner or holder of a *kĕsit* is helped by another person for wages or without compensation of any sort. The head levies, on the other hand, are on the ground, and are levied per *kĕsit*, regardless of what its area may be or how many people are working it.

It is not permitted for someone to perform *subak* services for more than one *kĕsit;* for violation of this rule a fine of twenty-five hundred doits is charged. A person who has a second *kĕsit* within the same crier's jurisdiction must perform *subak* services for one *kĕsit*, while for the other a relatively small money reimbursement called *ngampĕl* is due for the irrigation water. If the *kĕsits* are in two different crier's jurisdictions, a larger reimbursement known as *pĕnumbas toya* is required. The higher rate also applies when someone has more than two *kĕsits:* for the third and following *kĕsits pĕnumbas toya* always has to be paid. For both the cheaper

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312 241 474 and the higher rate of commutation for water there are maximums: for *ngampĕl* an amount equal to half of the landrent is prescribed, and for *pĕnumbas toya* twenty guilders. If someone takes on a sharecropper in mid-season this is called 'evading services'.[1] The fine is five thousand doits, plus compensation for the *subak* services not performed. Subject to the approval of the *klihan subak* or the crier, a substitute can be appointed for *subak* services, the *kĕsit*-holder remaining responsible. Especially officials and *pĕdandas* make use of this possibility. The *sawah*-holder is also responsible for violations of regulations by a sharecropper; on the other hand a sharecropper who has already performed *subak* services can no longer be discharged. *Subak* services cannot be transferred to a minor.

According to popular belief the Dutch authorities also have the right to claim services from members of the *subak*. In the present day this principle is no longer applied except in celebrating national holidays and during visits of the governor general. In cooperation with the *desa* the *subaks* help to put up decorations, erect festival structures, and spray the roads. *Subak* members must also turn out to form guards of honour and can be required to provide levies in the form of materials and money to be used to defray travelling expenses for persons who have to pass the night away from home while performing services. Obligations to the authorities are grouped together under the term *karya pĕngĕdalĕm*.

4

Religious Obligations

THE SUBAK SANCTUARIES

474 312 778 There are three categories of *subak* sanctuaries: the *pura pĕnyungsungan subak*, the *pura ulun charik*, and the *chatu*.

Under the term *pura pĕnyungsungan subak* fall the sanctuaries which were originally *desa* temples that one or more *subaks* helped to worship, after which in the course of time all the expenses connected with the temple services and offering ceremonials have gradually fallen to the *subak* or *subaks*, though others may con-

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tinue to participate in its services, either as a *desa* or as individuals. Examples of *puras* of this sort are the temples of Tilarnĕgari, Bakungan, Pĕgubugan, Maospait, and Pankung-panĕs. In Pura Tilarnĕgari only a small number of persons take part in services outside the *subak* context; Pura Maospait, on the other hand, enjoys the interest of the whole region, or at least of the heartland of Jĕmbrana, whose eastern limit is Yeh Ĕmbang. Participation in services by individuals may be the result of a pronouncement by a *balian*, or may be based on tradition.

The *puras ulun charik* were founded by one or more *subaks*, and, apart from a few exceptions which do not detract from the principle, are exclusively their object of worship. The *ulun charik* is frequently at the head end (*ulu*) of the ricefields (*charik*), and serves as a seat for Batara Sri, the rice goddess. Except in the case of the *subaks* Yeh Anakan and Tĕgaljati, each of which has both a *pura ulun charik* and a *pura pĕnyungsungan subak*, all the *puras ulun charik* are worshipped by more than one *subak*. There are no temples serving for all the *subaks* of the region or even for those of a whole district, though of course at certain times everyone joins together with the rest of Bali in addressing himself to Pura Bĕsakih, and at such times holy water for the *subaks* of the whole region is requested in a few prominent temples. The initiative for such a ceremony emanates from the *pĕruman kĕrtanĕgara*, the council of ruling princes, while implementation within the region is carried out by the head of the region *via* the chief agricultural official.

Chatu is the term for the offering columns or altars erected in every *subak* nearby waterworks of great importance for the water supply, in honour of the patron deity to whom the works are dedicated. Particularly beside the weir they are seldom lacking. Many a *chatu* has developed into a temple, as a result either of an increase in the number of *subak* members or of the fact that a certain weir has become important for more than one *subak*. In that case the number of altars is frequently enlarged, but the intrinsic difference in construction between a *chatu* and a *pura* is that only the latter is surrounded by a wall or a paling. In case a

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474 number of *subaks* worship at one *pura ulun charik* in common, each
312 of the separate *subaks* also has a branch temple in the form of a
778 *chatu* which serves as a temporary residence for the deity of the *ulun charik* when it is summoned to appear there on appropriate occasions.

TIMES OF WORSHIP

782 For all the temples and other places of worship there are certain
312 times when religious ceremonies are held, either periodically or
474 as occasion demands. The periodical ceremonies are divided into *ngĕrainin* and *ngĕbĕkin* or *ngusaba*.

Ngĕrainin consists of making a flower offering in the *puras ulun charik* and *pĕnyungsungan subak;* it takes place on certain favourable days (*rĕrainan*) such as full moon, new moon, Wednesday-Klion, Anggara Kasih (Tuesday-Klion), and the like, and is performed by the *pĕmangku* without the members of the *subak* being present. No *ngĕrainin* takes place at the *chatus*, which, since they are not *puras*, do not have *pĕmangkus*.

241 The harvest festival is celebrated in the last stage of the ripening
782 of the rice, in alternate years as *ngĕbĕkin* and as *ngusaba*. New moon is considered a favourable time for *ngĕbĕkin*, while *ngusaba* takes place at full moon. The former ceremony has the character of an offering to the demons; the latter, primarily a festival of thanksgiving to the deity, is more elaborate than *ngĕbĕkin* and is often accompanied by the placing of festive poles of bamboo (*penjor*) at each *kĕsit*. The *puras pĕnyungsungan subak* follow a pattern similar to that of the *puras ulun charik*. There, too, *ngĕbĕkin* and *ngusaba* alternate every other year or every two hundred ten days, depending on whether the Hindu-Balinese or the Javanese-Balinese calendar is followed, with the festival being held on the anniversary (*odalan*) of the temple. *Ngĕbĕkin* is the 'little' festival; the *ngusaba* of the *pura pĕnyungsungan subak* is also called *odalan*. The weir *puras* usually have their *odalan* on Anggara Kasih (Tuesday-Klion) in the week of Kurantil; if there is not yet a *pura*, but only a *chatu*, then the ceremony taking place on this date is called *ngĕjot*. (*Pĕjotan* is also brought to the *chatus* whenever the deity

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must be informed that a project of any size has been begun or finished.)

The following ceremonial obligations are less closely related to the temple system. Before a beginning can be made with working the land, the patron deity of the irrigation water is received ritually, for which purpose the members of the *subak* go together to the weir, carrying the requisite offerings and attributes. Reception offerings and purification offerings are both given; if the weir has not yet been cemented, but consists of boulders, rice and pastry packed in leaves are buried between the stones.

In times of drought supplications for rain (*nĕdug*) are made in all *subak* sanctuaries, and also elsewhere, for example at the sea temples. Until the rains come the guardians of the temples make offerings every Kajĕng (the first day of the three-day week). In cases of serious drought the ceremonial is led by a *pĕdanda*. Purification offerings for the crop are made periodically by individuals; in case of plant diseases or pestilences the *subak* organizes a purification festival.

Before a beginning can be made with the rice harvest, a rice mother (*nini*) is constructed on a suitable day, for which a Monday is frequently chosen. The *nini* which consists of a handful of unthreshed rice of a particular sort, serves as a temporary residence for Batara Sri; another handful of rice functions as the *nini*'s seat. The *nini* is placed on an offering platform of bamboo in the middle of the ricefield, and is presented a fragrant offering, *chanang wangi*. Harvesting may not begin until two days later. Then offerings are made to the *nini* and it is informed of the intention to begin cutting the rice. When the harvest has been taken home the *nini* is installed in the riceshed. The *nini* may not be eaten, but must decay of itself.

Once all a person's fields have been harvested and the paddy is in the shed, the ceremony of *mantĕnin* is held, for which the rice granaries are adorned with young coconut leaves plaited and clipped into decorations, plus festive poles, pennons, and cloth. Under no circumstances may rice from the new crop be used or sold before the *mantĕnin*. A person who is short of rice does not resort

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241 782 to the new crop, but buys or borrows enough to meet his needs until after the *mantĕnin*.

5

Subak Regulations

●312 474 *Subak* regulations are divided into *sima* and *awig-awig*, depending on whether they are considered as having emanated from the former royal administration or were drawn up within the *subak* itself. The *awig-awig* consist of customary law handed down by word of mouth, and have been recorded only sporadically, under the influence of agricultural officials and local headmen. Copies of the *sima*, on the other hand, are held by the regional and lower agricultural officials and now and then by a literate *klihan subak*. Used as a *sima* is a work attributed to the ruler of Buleleng which begins with the following words:

> Regulation of Gusti Gĕde Ngurah, who resides and rules at Buleleng. This edict applies to all subjects to the east of Ponjok Batu as far as Pĕtĕmon and the adjoining mountainland, and applies alike to Brahmins, *ksatriyas*, *wesyas*, and *sudras*, to all who must pay taxes on irrigable fields and levies on coconut groves and dry fields as these are levied by the agricultural officials in the aforementioned territory.

The text now in circulation in Jĕmbrana was imported from Buleleng, and gives the impression of being a codification from various sources, as is indicated by the repetition in the treatment of one and the same subject. In one of the last articles there is a dubious dating "Anggara-Klion, Wara Tambir, i Çāka 1805" (thus 1883 of the Christian era). The codex prescribes regulations on the payment of taxes, selling and pawning, pasturing cattle, and taking in stray cattle. Fines incurred for the stealing of water, seedlings, or rice and for destroying plantings or waterworks are also listed. At the same time mention is made of the measures which should be taken in case carelessness in burning off a field leads to damages for third parties, and the methods to be used in appointing *subak* functionaries and regulating local irrigation.

1:Franken et al M, G-5 (ca. 1913-1958) 1960
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An important point is that the *sima* places a sanction on violation of the *awig-awig*. The latter regulations, which have arisen in the bosom of the *subak* itself, have to do with *subak* services and levies; they list the penalties for disregarding the generally held views on the periodicity of agricultural activities, the maintenance of which is of importance for proper irrigation rotation and effective combating of crop diseases and pestilences. Violations of *subak* regulations are reported to the *klihan subak*, who considers them and pronounces penalties at the next *subak* meeting. In the great majority of cases the disciplinary measures of the *subak* appear to be efficient enough, and the agricultural officials need be called upon to intervene only rarely. In extreme cases a dispute may be placed before the Court of Kĕrta.

The violations that occur most frequently, and the fines placed on them, are as follows. For coming to a work project late there is a fine of fifty doits; if one does not appear at all, without reason and without excusing oneself beforehand, the maximum fine is twenty-five hundred doits. When someone comes to work without the materials he is required to provide, he is penalized with a fine of two hundred fifty doits; if what he has brought is found to be insufficient or of unsatisfactory quality the fine is a hundred fifty. There is a fine of twenty-five hundred doits for stealing water.

When the period set for the payment of a fine is exceeded, the fine is doubled, and in case someone repeatedly avoids paying a fine that he has incurred, a special mark, or *sawen*, is placed on his *sawah*. In Jĕmbrana the *sawen* serves only as a confirmation that official notice has been given for payment to be made within ten days, and not, as is elsewhere the case, as an indication that the *sawah*-holder has no right to work in the fields or receive irrigation water before his debt has been redeemed. The *sawen* is not removed until a supplementary fine of two hundred fifty doits has been paid. If even the placing of a *sawen* does not lead to the desired result, resort is taken to the *gade galur* procedure, in which the right to work the *sawah* in question is sold for one harvest to a third party for the amount of the fine due. The *sawah* may then be redeemed only after a full crop year; if it is not then redeemed,

1:Franken et al M, G-5 (ca. 1913-1948)1960
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312 a new period of a year is set automatically. The *gads galur* is also
474 frequently applied in cases of landrent arrears.
627 Systematic refusal to follow the orders of the *subak* board is punished very severely. The minimum fine for this violation is twenty guilders, to be paid before the harvest period. If a delinquent perseveres in his obstinacy, his crop can be confiscated, and he can be ejected from the *subak* association and placed on the black list in all *subaks*. No such drastic measure has ever proved necessary within human memory, however.

[695] Noteworthy is the custom that if someone is accused of having violated a regulation (for example of stealing water) and there is not sufficient evidence to prove the violation, the accused is required to take the oath of purification in one of the *subak* temples. This oath is also used when a violation is discovered without there being any indication as to who is guilty. The *sawah*-holders in the vicinity of the scene of the transgression are given a certain time to discover the guilty person, and if he remains unknown are also required to take such an oath.

6

Subak Funds

312 The funds of the subak are administered by the *klihan subak*, with
474 the agricultural official concerned having a check on their administration. The funds coming into the treasury consist of fines, water-service commutation fees, entrance fees, and incidental levies.

An entrance fee is due upon the foundation of new *subaks* or the extension of the area of a *subak* by converting dry fields into irrigable land, and amounts to a maximum of ten rixdollars per hectare, or some four rixdollars per acre. The funds belonging to the *subak* are used for building and maintaining irrigation works and for religious purposes. There is also a widespread custom to divide the proceeds from fines and commutation fees among members of the *subak* once a year.

Significant sums are sometimes brought together by means of levies. The monograph on landrent referred to above mentions

1:Franken et al M, G-5 (ca. 1913-1958) 1960
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the case of the *subak* of Yeh Ěmbang, where during the periods 1921–1928 and 1930–1931 the sums of *f* 28,335 and *f* 20,450 in cash were spent on tunnel construction by no more than 134 persons, without counting the costs of the food and materials which according to custom had to be given to the tunnel-diggers during the work. Total expenditures for tunnel construction amounted to sixty thousand guilders; the *subak* area was two hundred thirty hectares, or some five hundred seventy-five acres.

7

Subak Meetings

The *subak* meets together regularly, on a set day of the Javanese-Balinese thirty-five-day month. Aside from these meetings there are others as the occasion demands. The latter sort of meeting is held, for example, during a work project, when the workers come together after the day's task has been completed in order to receive further instructions and to take decisions. The periodical meetings are held in the *pura ulun charik* or one of the other sanctuaries of the *subak*. At them the organization of *subak* services and work projects to be undertaken are discussed; *subak* regulations are occasionally revised or new regulations are decided upon; planting dates and the proper times for coming religious ceremonies are announced; transgressors are penalized and orders of the authorities are made known. In special cases the monthly meetings may be attended by the regional agricultural official or other authorities.

8

Regulations Regarding Operation of the Sawahs

When the time has come to make a start with setting out seedlings, one of the members of the *subak* board is appointed as the pacemaker, the *pĕngĕwiwit*, that is to say 'he who begins'. *Subaks* under the guidance of the same *klihan* or located near to each other frequently appoint a joint pacemaker. The pacemaker has

1:Franken et al M, G-5 (ca. 1913-1948)1960
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312 474 627 a right to assistance from the other members of the *subak*. Only one *kĕsit* is planted, however, and before the work of planting it has been finished and the ceremonial regulations have been met, nothing may be planted in the other *kĕsits*, not even in others belonging to the pacemaker. The transplanting is accompanied by certain ceremonials, the costs of which are borne by the members of the *subak*.

The next day, Nyĕpi, it is not permitted to work in the *sawahs*. Violation of the prohibition is punished with a maximum of twenty-five hundred doits. Then follows a period of twenty days within which every *subak* member must complete his planting. There is a fine of five thousand doits for planting before or after the official period, and the right to possible exemption from landrent in case of a bad crop is cancelled. Persons who have aided the transgressor in violating the regulation are punished with a fine of twenty-five hundred doits. The fixing of a period within which planting has to be done is of importance with an eye to proper water control, efficient division of labour, and measures in connection with combating plant diseases and pestilences. The appointment of a pacemaker has its utility from a disciplinary point of view and makes the date when planting can be begun generally known, while the association with traditional magical, religious convictions evinced by the offering ceremonial and Nyĕpi Day is also of value in this respect.

If for no good reason a *sawah* is not farmed, a fine of twenty-five hundred doits is due, while the landrent has to be paid in full. In case the transgressor is a sharecropper he also has to reimburse the landholder for the income lost. The *subak* does not like to see fields left unplanted: that serves not only to make it more vulnerable economically, but also undermines discipline, and *sawah* plots overgrown with weeds provide a welcome home for all kinds of vermin. There are no religious duties or prohibitions with a restricting effect on the course of agricultural affairs. Offerings and temple ceremonials do not demand an excessive amount of time and are frequently charged to groups of persons in rotation. The people have found a means of adjusting expenditures for religious

1:Franken et al M, G-5 (ca. 1913-1958) 1960
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purposes to the circumstances of the times in the system of celebrating festivals according to various levels of expense: *nista*, *madya*, and *utama*, that is to say poor, average, and good.

9

Harvesting and Planting Associations and the System of Mutual Assistance

The forms within which agricultural labour is made collectively available are legion. Forms in which groups of persons seek work for wages are to be found side by side with forms with the exclusive purpose of lending mutual assistance. Sometimes there is a formal association (*sěka*) with officers, oral regulations, and a system of fines, acting in concert in its relations with third parties; sometimes the relationship is only one of an incidental nature. A few *sěkas* which work for pay and deserve mention are the *sěka mĕmula*, or association for transplanting seedlings; the *sěka manyi*, or harvest association; and the *sěka nĕpuk*, for binding paddy into sheaves.

The pulling out (*ngabut*) and transplanting (*mĕmula*) of the seedlings is done by men. The cutting (*manyi*) is done by women, but the binding of paddy into sheaves (*nĕpuk*), each consisting of a set number of handfuls, is again work for men, since manipulating the heavy weights and cutting off the excess rice straw requires a great deal of physical strength. The wages consist either of money or of food and money; for harvesting there is also payment in kind: for every twelve handfuls of rice one is the wage for cutting. At the moment of writing the customary money wage is twenty-five cents per day; when vegetables made into a sauce are provided for the rice which the members of the *sěka* bring with them, the wage is twenty cents a day.

Sometimes such an association is formed primarily to lend mutual assistance to its members, and works for wages only for third parties. It sometimes also happens that a person without land of his own has joined a *sěka*, in which case when it is his turn to have the labour of the association at his disposal he transfers the right to someone else for a reimbursement in money: this custom is to be found in the district of Jĕmbrana.

1:Franken et al M, G-5 (ca. 1913-1948)1960
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241 476 Mutual assistance is customary in working the soil, sowing the nursery beds, transplanting the seedlings, weeding, cutting the rice, binding it into sheaves, and taking the harvest home. It is usual that food is supplied during the period that mutual assistance is given. Sometimes the same group of persons is involved in the *sĕlisihan*, the mutual-assistance group, for the various tasks, but usually not, since the number of persons necessary is not the same for each sort of work. In the district of Nĕgara all agricultural work is done by *sĕlisihans*.

Frequently there is a complicated system such as is followed for the harvest associations of women, where dozens of women are sometimes united in one *sĕlisihan* working according to a carefully drafted plan. A quite accurate estimate is made of how many cutters will be needed in the course of one single day to cut the rice of a member of the *sĕlisihan*. In this way it is possible to divide the cutters over the various *sawahs* each day in an efficient way. It is figured that a workday ends about one hour before sunset; if the cutters on a certain *sawah* are through with their work much earlier, it is a sign that the estimate of the *sĕlisihan* was too high. The *sawah*-owner then receives a certain compensation in money for the excess food he has given. It is quite just that this indemnity should be given, the more so since the wife of the landholder has to give the same number of days of service as she has profited from.

When someone's crop is not completely harvested in one day he must hire a *sĕka* for the rest. The *sĕlisihan* is completely separate from the *subak* association, which serves only irrigation interests. Often the community unit, the *banjar*, serves as a basis for a *sĕlisihan;* in other cases relatives and acquaintances join together.

10

The Formation of New Subaks

467 312 474 Several new *subaks* have been created in recent times in the eastern part of the region of Jĕmbrana, where a beginning in clearing the forests was made only after the Dutch expeditions against southern Bali in 1906–1908. The landrent monograph referred

1:Franken et al M, G-5 (ca. 1913-1958) 1960
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to above reports that on 13 April, 1922, several members of the *desa* of Pĕngyangan concluded an agreement with a tunnel-diggers' association. The construction of tunnels stagnated owing to difficulties in the lay of the land, and had not yet been completed at the end of 1931. At present the *subak* of Pĕngyangan has an area of more than forty hectares, or over a hundred acres, with exactly fifty landowners from whom a total of *f* 530 in landrent is due. Reportedly the following procedure was used in forming this *subak*. From the very beginning the *sĕdahan agung* and the *sĕdahan* concerned were involved in the matter, and they were constantly kept informed on the amount of yardage measured out by the tunnel-diggers. After the tunnel-diggers' association had reported which terrains might reasonably be expected to be irrigable, the owners of the gardens indicated joined together to form a *subak*.

Even more recent is the formation of the Sĕrangsang River *subak* (in the territory of the *desa* of Gumbrih), which is now twelve hectares or some thirty acres in size and numbers twenty-six landowners, while the landrent due amounts to *f* 110. The first *sawahs* date from around 1914; at that time seventeen persons joined together in a *subak* on the initiative of the village elder, who was later recognized by the Dutch authorities as *klihan*. Irrigation water was obtained by damming off the Sĕrangsang River, a ravine which is completely dry during the eastern monsoon. The water is carried to the *sawahs* through an open conduit *via* the coconut groves of Pulukan Plantation. Some difficulties are created by an irregularity in the lay of the land, which has made it necessary to construct an aqueduct. The conduit follows the crown of a dike, but the dike has not proved able to stand up against the pressure of the water.

II

Moslem Subak Members

Though there are no *subaks* in Jĕmbrana consisting entirely of Moslems, there are associations here and there where their proportion is fairly high. The *subak* of Yeh Anakan, in the vicinity of

1:Franken et al M, G-5 (ca. 1913-1948)1960
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312 474 563 Moslem settlement of Banyubiru, has the largest proportion of Moslem members, sixty per cent. of the total. The board of the *subak* contains the following functionaries: a *klihan subak* (Bali Islam), an assistant *klihan* (Bali Hindu), three criers (Bali Hindu), and three assistant criers (Bali Islam). It is noteworthy that the number of Bali-Hindu members of the *subak* board is relatively large, and that the important functions of crier are all filled by Bali Hindus. According to a statement of the *klihan subak* this must be attributed to the circumstance that the maintenance of the *subak* sanctuaries rests completely on the Bali-Hindu membership contingent. The services and levies for secular ends are the same for both categories of *subak* members. Religious obligations are fulfilled by each group according to the requirements of its faith, though in case a Bali Hindu has a Moslem sharecropper a half share is expected to be provided for the Balinese ritual.

Before any important task is undertaken and also after the harvest (at Pulukan before the cutting is begun) the Moslems hold a sacred repast, a *sĕlamatan sĕdĕkahan*, with rice, *kĕtipat* (rice steamed in coconut leaves), rice porridge, and pastry, at the work site, and either a mosque official, a religious teacher, or someone else who is familiar with the ritual recites a special prayer. A ritual prayer for a good crop is also sometimes held in the mosque. In case of a crop disease the *tolak balak* ceremony, literally 'the averting of misfortune', is held. Then every member takes a plaited bamboo mat containing *kĕtipat* and pastry to the *sawah*, where a special prayer is recited over these gifts. In times of sickness and disaster it is, in fact, also the custom to repeat this ritual in the open fields near the *desa*, and the *tolak balak* is performed for the benefit of dry-field farming as well. This Bali-Islam ceremony has points of correspondence with the Bali-Hindu festival of purification.

There is also a ritual prayer for rain in periods of prolonged drought. This *sĕmbahyangan istika* (recited in the Javanese way) takes place in the mosque after the Friday service and not in the open air, though on the same occasion Moslem members of the *subak* hold a *sĕlamatan sĕdĕkahan* by the weir. In the mosque owners

1:Franken et al M, G-5 (ca. 1913-1958) 1960
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of dry fields and gardens take part in the ceremony along with the *sawah*-holders. The *sĕmbahyangan istika* is repeated every Friday until the rains come. It has happened several times that it was held at the request of the regional agricultural official to the *pĕnghulu*. (It should be mentioned that in earlier years the Pulukan agricultural official was a Moslem.) As a rule relations between the Bali-Hindu and Bali-Moslem members of the *subaks* leave nothing to be desired.

12

Irrigation and Landrent Levies

Under the agricultural official, or *sĕdahan agung*, for the region of Jĕmbrana, who is also the acting head of the regional landrent office at Nĕgara and assistant collector of revenues, are four *sĕdahans*, or lower officials, for the *sawahs* and two for the dry fields. The first category of officials are called *sĕdahan tĕmuku*, a designation which has to do with one of their chief tasks, supervising the distribution of irrigation water by means of distribution blocks (*tĕmukus*), while their fellow-officials for the dry fields (*tĕgalan*) and gardens (*abian*) are called *sĕdahan abian-tĕgal* after the nature of the lands under their jurisdiction. The territory over which a *sĕdahan* is placed, the *pĕsĕdahan*, is divided in *desas* in the case of dry lands, but the wet ricefields are organized in *subaks*.

The *sĕdahan agung* and the *sĕdahans tĕmuku* are concerned not only with the collection of taxes, but also with the *subak* system. When large-scale projects are to be taken up, or when there has been serious damage to the irrigation works of one or more *subaks*, the *sĕdahan agung* and his *sĕdahans* regulate the way in which the various *subaks* are to cooperate and to what extent other *subaks* are to lend their assistance. The *sĕdahan agung* also gives advice on irrigation problems and functions as a link between the *subak*, the Dutch authorities, and the relevant technical services. He moreover makes contact with the *desa* administrations in order to arrive at an effective arrangement for setting dates when statute labour and *desa* and *subak* services are to be rendered.

1:Franken et al M, G-5 (ca. 1913-1948)1960
OF7 Balinese OF7

312 474 624 To mention a few examples, in September, 1935, the extensive damage to the tunnel system of the *subak* of Yeh Buah wrought by a flash-flood was repaired with the *subaks*, the central authorities, and the irrigation service cooperating, while in December of the same year a start was made in straightening the lower reaches of the Pĕrgung River. In these projects the activity of dozens of *subaks* was organized; the help of the irrigation service was restricted to giving advice and surveying the land.

In some cases the *sĕdahan agung* sees to a certain amount of coordination in religious matters, while the adjudication of *subak* violations according to *adat* law also falls within his competence. In the latter the *sĕdahan agung* has an appellate function; he has the power to apply sanctions recognized by *adat*, such as fines and the withholding of irrigation water, but he cannot impose imprisonment.[7] The *sĕdahans tĕmuku* supervise the use and accountability of *subak* funds. The agricultural officials also have some influence on arrangements for irrigation rotation between *subaks*. In the westerly irrigation territories such arrangements are not necessary, since the irrigation-water supply is sufficient; in the *pĕsĕdahan* of Jĕmbrana and further to the east there is a system of irrigation rotation regulating which month a specific *subak* has disposal over water. The arrangement is constant: there are no periodical changes with the intention of creating conditions which are in the long run the same for everyone. It is the rule, however, that the *subaks* lying farthest from the weir receive water first. Also steps are taken to counteract consequences which might be unfavourable for some *subaks* as a result of a certain seasonal arrangement, in keeping with the principle that everyone has to contribute a like amount in the costs of irrigation. In each of the two *pĕsĕdahans* Nĕgara and Jĕmbrana there is only one *subak* depending on tunnel irrigation; in the *pĕsĕdahan* Mĕndoyo there are underground conduits in the irrigation system of four *subaks*. In Jagaraga-Pulukan, however, there are ten *subaks* with tunnels. As regards dry-field farming the *sĕdahans* and the *sĕdahan agung* have a function in the dissemination of agricultural information.

1:Franken et al M, G-5 (ca. 1913-1958) 1960
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new associations other than *sawah* associations, and 'club life' is, accordingly, very restricted.

3

Voluntary Associations

SAWAH ASSOCIATIONS

It is clear from the above stipulation in the village constitution that the *sawah* associations are considered as voluntary associations. They are, in fact, not only private, but often temporary in character.

In Tĕnganan the notion does not obtain that the water belongs to the gods or to the ruler. Like the *sawah*-association temple, it is a possession of the ground. Hence anyone who owns land also has water, though it must be dammed up in the river and conducted to the *sawahs*. The irrigation system in Tĕnganan is still in the small-scale stage. Various complexes of farmland inside the *desa* were gradually made irrigable, independently of one another. The result is a large number of weirs quite close to each other which have the advantage of requiring only a small amount of labour to be repaired and maintained each year. The limited number of workers on the weirs means that no elaborate organization is necessary, especially since the persons operating the land have only a temporary interest in it: the Tĕngananese proper are forbidden to work in the ricefields, so that the offering *sawahs* of the *desa* and the membership shares and private *sawahs* of the core villagers are farmed by other people on shares. The fields are usually awarded to sharecroppers (*pĕnyakaps*) in whole complexes or *chariks* drawing their irrigation water simultaneously from one conduit, and to sharecropper associations called *sĕkahas pĕnyakap*.

Hence there are on the one hand the holders of the *sawahs* in a *charik*, organized in a *sĕkaha charik*, and on the other the *sĕkaha pĕnyakap*, consisting of all or part of the persons working the *sawahs* of the *sĕkaha charik* and looking after the waterworks.

There are fourteen *chariks* in the village territory of Tĕnganan Pĕgĕringsingan, seven to the northeast of the Buhu River and

2: Covarrubias R-5 (1930-1933) 1938
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243 are sprinkled with the dainty blades of the newly planted rice in an all-over pattern of chartreuse on a ground of brown ooze. This thickens eventually into a tender yellow-green carpet which turns to a rich gold ochre as the grain ripens, finally leaving only dry, cracked mud after the harvest. The landscape is continually changing, and as the crop begins or ends, a familiar surrounding is so transformed as to become almost unrecognizable.

THE SUBAK

● 312 The rugged, mountainous nature of the island, closely furrowed by deep ravines, makes irrigation extremely difficult. Water is led from the mountains to the various levels of cultivated land by an elaborate system of canals, dams, bamboo pipes, and even long tunnels cut through solid rock, to the dikes that permit the sawa to be flooded or drained at will. Solid matter is filtered off and pools are made for sand deposits to prevent the clogging of the ricefields.

It is obvious that small landowners could not carry out, alone, 474 the tremendous task of attending to the work of irrigation. It 312 became necessary for them to organize into *subaks*, agricultural co-operative societies, "water boards" that control the equitable distribution of water to their members, all those who take water from a common source. The objectives of the *subak* are to give the small agriculturist the assurance that he will not lack water, to police the dams effectively so that strangers will not divert the water supply, to settle disputes, and to attend to the communal rice festivals. In the village the society assumes full social, technical, and administrative authority in all matters concerning irrigation and agriculture.

Like the village and ward associations, the *subak* is presided over by elected headmen, the *kliang* and *penyarikan subak*, with their assistants (*pangliman*). The *subak* leaders open and preside over the meetings, see that the decisions and rules are carried out, impose fines and penalties, and act as treasurers of the organization. They keep written records of the names of the mem-

2: Covarrubias R-5 (1930-1933) 1938
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bers and of all transactions and proceedings. The offices of the subak leaders are unrewarded, except, as in the case of other societies, for certain privileges such as extra shares of water and a small percentage of the fines collected. Every man who owns ricefields is compelled to join the subak and to carry out orders. Members may be allowed to buy off their services, but they must be present when important repairs are made, even though they may pay others to do their share of the work.

Once a month, or oftener if necessary, a general meeting is held in the little temple of the subak, a small shrine dedicated to the agricultural deities, built out in the middle of the ricefields. Attendance is compulsory and an absentee who is not properly justified is fined. When the members have gathered, the headman reads the roll, communicates the improvements and repairs to be carried out, reports on the relations of the society with higher officials [1] and with other subaks, and accounts for money received in fines and fees as well as what has been spent in materials, offerings, and so forth. Important decisions are reached by majority vote. When all business is settled, the headman adjourns the meeting and an informal social gathering follows in which tobacco, sirih, and refreshments are served by appointed attendants. If the subak is a prosperous one, there may even be a banquet.

Like other Balinese associations, the spirit of the subak is essentially communal; all members abide by the same rules, each one being allotted work in relation to the amount of water he receives. Certain stipulations are made to prevent individuals from holding more land than would be convenient to the community. A man who has more land than he can work is compelled to share the produce with people appointed to help him.

RICE CULTURE

Before any work is done in the ricefields, an expedition composed of the kliang, a priest (pemangku), and four or five subak mem-

[1] The various subaks of a district are under the control of an official, the sedahan, a sort of minister of agriculture, now under a Government salary.

2: Covarrubias R-5 (1930-1933) 1938
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243 bers goes to the holy sources of water such as Lake Batur, or
782 Besakih in the Gunung Agung. They take offerings with them
312 to gain the goodwill of the deities of the lake or of the sacred spring. Some water is brought back in a bamboo container (*sudjang*) wrapped in a new cloth and hung with strings of *kepeng*, topped by a bunch of beautiful mottled red and green *andong* leaves for decoration.

At the return of the expedition the *sudjang* is deposited on an altar in the temple of the *subak*. It is believed that the deities of

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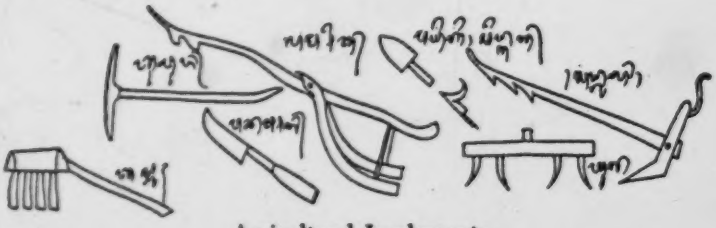

Agricultural Implements

the holy water are embodied in the container, and a feast (*mapag*) is given in honour of the divine guests. To entertain them so that they will not leave, the *subak* members perform dances and burn incense in braziers. The fields are sprinkled with holy water and the rest is poured into the common canal of the *subak* so that all the fields may benefit by it. The feast over, the necessary repairs are made, with more offerings so that the water will flow through the proper channels. Then the water is let in to flood the dry soil, and all *subak* members meet again to take a vow not to steal from one another. The land is cleansed with a great offering to the evil spirits and cockfights are staged to satisfy their thirst for blood.

243 When planting-time arrives, the land is ploughed over and over
527 again, and harrowed to incorporate with the soil the weeds and
541 rice straw that serve as fertilizer. In some places the land is effectively ploughed, in a spirit of festivity and sport, in great bull races (*megrumbungan*) held before a new crop is planted. The

9:Geertz E-5 (1957-1958) 1959 OF7 Bali OF7

there is but one, most often two or three. Sometimes there are as many as four or five, usually reflecting either a large bandjar or one sharply segmented into strong kin or other subgroups, in which all important cross-cutting minorities must be given a role in bandjar leadership. Nowadays klian are usually elected for five years and then replaced by a new set, often chosen by the outgoing group with the approval of the bandjar meeting, so as to avoid electioneering. Klian are assisted by various lesser officials, whose jobs are usually rotated monthly among the members of the bandjar. Though the klian lead the discussion at the bandjar meeting, hold the public treasury, direct communal work, and commonly are men of some weight in the local community they are not possessed of much formal authority. In line with the general Balinese tendency to disperse power very thinly, to dislike and distrust people who project themselves above the group as a whole, and to be very jealous of the rights of the public as a corporate group, the klian are in a very literal sense more servants of the bandjar than its masters, and most of them are extraordinarily cautious about taking any action not previously approved in the hamlet meeting. Klian, who are unpaid and have no special perquisites, feel that their position mainly earns them the right to work harder for the public and be more abused by it; wearily, they compare their job to that of a man caring for male ducks: like the drake, the bandjar produces lots of squawks but no eggs.

3. *Ownership of rice land lying within a single watershed.* Unlike peasant societies in most parts of the world, there is in Bali almost no connection between the ownership and management of cultivable land on the one hand and local political (i.e., hamlet) organization on the other. The irrigation society, or *subak*, regulates all matters having to do with the cultivation of wet rice and it is a wholly separate organization from the bandjar. "We have two sorts of custom," say the Balinese, "dry customs for the hamlet, wet ones for the irrigation society."

Subak are organized according to the water system: all individuals owning land which is irrigated from a single water source—a single dam and canal running from dam to fields—belong to a single subak. Subak whose direct water sources are branches of a common larger dam and canal form larger and less tightly knit units, and finally the entire watershed of one river system forms an overall, but even looser, integrative unit. As Balinese land ownership is quite fragmented, a man's holding typically consisting of two or three quarter- or half-acre plots scattered about the countryside, often at some distance from his home, the members of one subak almost never hail from a single hamlet, but from ten or fifteen different ones; while from the point of view of the hamlet, members of a single bandjar will commonly own land in a large number of subak. Thus as the spatial distribution of temples sets the boundaries on Balinese religious organization, and the nucleated settlement pattern forms the physical framework for political organization, so the concrete outline of the Balinese irrigation system of simple stone and clay dams, mud-lined canals and tunnels, and bamboo water dividers provides the context within which Balinese agricultural activities are organized.

Though organizational details and terminology differ widely from region to

9:Geertz E-5 (1957-1958)1959 OF7 Bali OF7

243 region, there are elected chiefs—usually called *klian subak*, as opposed to
312 *klian bandjar*—over the subak, while the higher levels of watershed and river
624 system organization are coordinated by appointed officials of the central government as the heirs of the traditional irrigation and tax officials of the old Balinese kingdoms. But, again, it is primarily the subak as a whole which determines in the light of its inherited traditions, its own policies.

621 The subak is responsible for the maintenance of its irrigation system, a task
312 involving almost continual labor, for the apportionment of water among mem-
243 bers of the subak, and for the scheduling of planting. It levies fines for infractions of rules (stealing water, ignoring planting directives, shirking work, and so on), maintains the subak temples and carries out a whole sequence of ritual activities connected with the agricultural cycle, controls fishing, fodder gathering, duck herding and other secondary activities in the subak, and so on and so forth. In most of the larger subak today the actual irrigation work—the constant repair of dams and canals and the perpetual opening and closing of water gates involved in water distribution—is carried out by only a part of the subak membership, called the "water group," which then receives a money payment from those not so working, the amount again being determined by the subak as
[427] a whole. Complex patterns of share tenancy, involved systems of controlled crop rotation, varying modes of internal subak organization, and the increasing efforts by the government water officials to improve inter-subak coordination complicate the whole picture. But everywhere the status of the subak as an independent, self-regulating, corporate group with its own rules and its own purposes remains as unchallenged today as it was in the times of the Balinese kings.

564 4. *Commonality of ascribed social status.* The Balinese, like the Indians from
554 whom they have borrowed (and reformulated) so much, have commonly been described as having a caste system. They do, in the sense that social status is patrilineally inherited, that marriage is fairly strictly regulated in terms of status, and that, save for a few unusual exceptions, mobility between levels within the prestige system is in theory impossible and in practice difficult. But they do not in the sense of possessing a ranked hierarchy of well-defined corporate groups, each with specific and exclusive occupational, social, and religious functions all supported by elaborate patterns of ceremonial avoidance and commensality and by a complex belief system justifying radical status inequality. Were the term "caste" not so deeply ingrained in the literature on Bali, it might be less confusing to speak of the Balinese as having a "title system," for it is in terms of a set of explicit titles, passing from father to child and attached to the individual's name as a term both of address and reference, that prestige is distributed.

Following Indian usage, the Balinese divide themselves into four main groups: Brahmana, Satria, Vesia, and Sudra. Since in such a classification more than 90 per cent of the population falls into the fourth category, a more common division for everyday use is made between *Triwangsa* ("the three peoples"), the first three groups taken as a unit, and the *Sudra*, which in a

9:Geertz E-5 (1957-1958) 1959 OF7 Bali OF7

like, having its own independent treasury, rice shed, and meeting place. For larger and more important local tasks the klirans of one hamlet will fuse as a single unit; in the same way hamlets unite within perbekelan for affairs of government, and perbekelan unite within Blaju as a whole to support the Kahyangan-Tiga temples. As the irrigation societies in the Blaju area are small and land holdings are not so scattered, irrigation societies tend to be more or less informally identified with the perbekelan and hamlets closest to them, so that the whole system becomes territorialized through and through.

At the geographical center of this whole territorial complex, facing the market and the main crossroads, lies the "palace" (*puri*) of the ruling family, a walled-in, shabby-genteel complex of houseyards, temples, alleyways, and open courts about a city block square, tightly packed with more than five hundred people comprising a single Vesia-level dadia. The head of this dadia, Anak Agung Ngurah Njoman, is at the same time customary law chief for the whole area of Blaju—i.e., the four perbekelan within the Kahyangan-Tiga set. Though largely an honorary position concerned with giving advice in matters of custom, this apical role symbolizes the continuing dominance of the ruling family in the area. At the perbekelan level, two of the four perbekel are from this family (one of them again being the Anak Agung himself), the other two being ranking Sudra with traditional ties to the "castle."

The role of this elite group is strengthened in many ways. First, unlike many Balinese aristocrats, the Blaju ruling family is not impoverished. About one-fifth of all rice land in the area is still in their hands (though it is owned individually, not collectively, within the dadia), and as almost all this land is sharecropped by Sudra tenants who also have corvée obligations to their landlords, traditional patron-dependent ties remain of central integrative importance. Second, although the members of the ruling dadia live all in one place and so should be members of a single hamlet according to the territorial system, they are by traditional practice distributed among the sixteen bandjar in more or less equalized groups. They are assigned bandjar membership independent of their residence so as to insure a voice (and an ear) for the ruling house in each locality and to strengthen the unity of the whole region. Third, there is in Blaju a major temple, rivaling the Kahyangan-Tiga in importance, which is supported exclusively by all the people in the region who bear Triwangsa, upper-caste titles, thus symbolizing the importance of status and serving to ally all the local high prestige groups with the ruling dadia in its largely successful effort to maintain the traditional stratification system unimpaired.

As noted, this rather neat integration of territorialism and status is not altogether a traditional matter, but stems in part at least from rather recent reforms. The kliran subhamlet pattern, the distinctive element in the whole system, was only instituted in 1940. At this time the hamlet system was very weak, kinship unimportant, and most village functions had fallen into the hands of voluntary seka groups. "People" felt—evidently under prodding from the aristocracy, which began to reassert its leadership at this time—that

[102 cont.]

623 All dèsa business is discussed in these village meetings, including financial matters, and thus the amount of the taxes to be levied is discussed and fixed.

634 Districts. A collection of villages forms a district, at the head of which stands a pambekelgedé or poenggawa. They are [625 702] involved in the management of the dèsa only insofar as matters of policing and army service (service outside the dèsa) are concerned. The grouping into districts, therefore, has no great significance for the ordinary Balinese. This cannot be said of the principalities, the larger political units that developed on Bali and now belong completely to the past.

64 174 Princes. According to Liefrinck (1), the Balinese principali-

1. F.A. Liefrinck, "Bijdrage tot de kennis van het eiland Bali (Contributions to Knowledge of the Island of Bali)" Tijdschrift voor Taal-, Land-, en Volkenkunde van Nederlands Indië, Vol. 33, p. 347 f.

ties probably came into being in the following manner. In [312 721] former times the various dèsa often had questions to discuss among themselves, especially concerning water for irrigation purposes. Originally, this perhaps led to armed combat, but gradually the parties came to appeal to arbitration by persons in whose judgment they had faith. These persons exercised a growing influence in the course of time. Their descendants knew how to strengthen this and to draw the whole of the administration of justice into their hands. As soon as they succeeded in making themselves masters of the rights to irrigation water and were able to claim payment for the use of it, [103] they [643] became full-fledged Eastern despots. During the period when the Balinese princes had unlimited power, it was in very small [641] measure a blessing for the ordinary people; on the contrary, in most cases it was a heavy burden. The inhabitants had to [651] guard the pòeri, the royal residence; the prince placed a tariff

64 [103 cont.]
174 on agricultural products, especially rice and coconuts, and the
651 best of these products had to be presented to him.

Soebak. Bali, a land where sawah cultivation is of the
634 greatest importance and where the inhabitants are therefore
●312 greatly concerned about having a regular supply of irrigation
476 water, is also a land where a peculiar native jurisdictional community has developed, the Balinese polder, soebak. It is true that this is very closely connected with agriculture and thus could be dealt with in the chapter on "Means of Subsistence," but because of its special importance for Balinese society and because it is a special form of jurisdictional community, we will discuss it in this chapter as a more suitable place.

The soebak is formed when new land is opened up, with the aim of procuring for the owners of small holdings the advantages that large sawah holdings have (with regard to irrigation water). This form of co-operation in no way diminishes the rights of ownership of the small holders. The soebak, then, is an association of all the cultivators whose sawahs can be irrigated from one aqueduct, with the aim of building and caring for the upkeep of the aqueduct and also of regulating, through mutual consultations, the other agricultural operations. One soebak may embrace several dèsa, and in large dèsa there may be more than one soebak.

At the head of a soebak is the klian soebak, chosen by all the members who make up the sekaha soebak. He keeps a list of the members and is charged with governing sawah operations in consultation with the members. Once it has been decided
[685 when the rice is to be planted, he must see to it that this actu-
627] ally is done. He must also be on guard against water thieves. He tries to settle amicably the questions that arise among the members of the soebak.

[623] When matters warrant it, the klian calls a meeting. Usually the meetings take place on a definite day of the month (35 days), sometimes at each [104] full moon. At first these meetings are held in the open, later in the newly built soebak temple.

[104 cont.]

634 For his exertions on behalf of the soebak, the klian some-
●312 times receives a double portion of irrigation water, and, as tax
[651 collector, he receives a part of the income from taxes.
465]

At the head of a number of soebak in one or more dèsa is the sedahan temboekoe, who stands above the various klian and supervises the distribution of the water. At the same time, he looks after the taxes for the prince. Above all of them is the head of the whole water supply, the sedahan agoeng, who holds regular monthly meetings with the several sedahan temboekoe. In 1882, when (in Buleleng) direct governmental administration was introduced, the sedahan temboekoe received a monthly salary of 130 guilders and the title of subcollector.

611 Family Law. On Bali and the Balinese portion of Lombok
[614] (western Lombok) one can speak of a patriarchal family system,
but there is no longer any trace of clan divisions. There is
564 another dividing line, however, that of the caste system. The
greatest cleavage is that between the members of the three high-
est castes, the triwangsa, descendants of overlords, on the one
hand, and the soedra, the subjects, on the other. It is a rule
[582] that a man may not marry a woman of higher caste; he may,
however, marry a woman of lower caste. One may thus in part
speak here of true endogamy, the prohibition against marrying
outside of one's group, in this case outside of one's class or caste.
Otherwise the marriage and inheritance laws have more in com-
583 mon with those of patriarchal exogamy: the custom of bride
611 price, descent reckoned in the male line (for determining caste
423 membership, only that of the man is considered), inheritance
rights only for the male relatives in the male line, while the
[587] woman is, in theory, part of the inheritance, although this has
not led to levirate marriage.

Formerly, in the case of a death without heirs, the inheritance, after debts and the cost of cremation had been deducted, went to the dèsa association, later to the prince. This led [105]
833 to very sad consequences; the wives and daughters moved to the
428 royal residence and were simply sent out as prostitutes to increase

12: Haar S-4 (1939) 1948 OB1 Indonesia
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"old style" and "new style" desa. In the old-style desa a special group of married citizens is obliged and privileged to carry out the functions of worship. The membership of such groups numbers twenty or multiples of twenty. The members are holders of certain particular agricultural lands. At least, they must be landed proprietors and married. Succession to the group is based on a variety of principles. The oldest villagers have special administrative functions and a place to fulfil in the worship of the gods. Even the peacemakers in village disputes are in essence religious administrators, for they protect the village territory from defilement brought on by quarrels.

The social strata make up the Balinese village. The nuclear group of first-settlers holds the first rank. A larger group of subordinate middle-class people shares, to some extent, in the land and has limited responsibilities. Lodgers and immigrants form the third class, known as "sampingan."

In the villages situated outside of the former principalities, there are various societies, which are subordinate to the village authority. Such are the "banjar," the district society, the young men's and young women's societies, the music and drama society, and so forth. In the appanage territory these freely-formed societies exist as autonomous communities outside of village authority.

Citizenship in the new-style villages is less complex. Every adult, married male, who has a residential compound and has lived in the village for a year, is admitted to the village society. He is, in fact, obliged to join up. Administration by a village headman (kilan), sometimes assisted by some henchmen, replaces the gerontocracy of the old-style system.

Alongside of the two basic types of Balinese communities are the important irrigation associations (subak), a union of sawah[24] owners under a headman, but organized in various ways, and variously aligned with the villages.

In Lombok, the desa is a territorially-based community made up of unrelated families. It possesses an area of disposal and is governed by a "kepala desa."

11. *The Javanese desa.*—The Javanese desa is another type of community, whose base is purely territorial. Its constituency is formed of unrelated individuals and families. And in addition to the nuclear desa citizenry, there are alien, non-native residents, mainly

[24] [Cultivated fields held under a community right of disposal. See the next chapter.]